AT-S25 Version 1.5 Management Software for the AT-8324 and AT-8316F Series Fast Ethernet Switches

Software Release Notes

Please read this document before you begin to use the AT-S25 Version 1.5 management software.

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Supported Platforms

AT-S25 Version 1.5 management software is supported on the following Allied Telesyn International switches:

- AT-8324 Fast Ethernet Switch
- AT-8316F/SC Fast Ethernet Switch
- AT-8316F/VF Fast Ethernet Switch
- AT-8316F/MT Fast Ethernet Switch

Version 1.5 supports the following expansion modules:

- AT-A14 100/1000Base-T (RJ-45) Expansion Module
- AT-A15/SX 1000Base-SX (SC) Expansion Module
- AT-A15/LX 1000Base-LX (SC) Expansion Module
- AT-A16 100Base-FX (VF-45) Expansion Module
- AT-A17 100Base-FX (SC) Expansion Module
- AT-A18 10/100Base-TX (RJ-45) Expansion Module
- AT-A19 100Base-FX (MT-RJ) Expansion Module
- AT-A24/SX 1000Base-SX (MT-RJ) Expansion Module
- AT-A24/LX 1000Base-LX (MT-RJ) Expansion Module

This version also supports the AT-STACK8 Stacking Module.

Documentation

For hardware installation instructions, refer to the following guide:

- **AT-8316F/MT, AT-8316F/VF, AT-8316F/SC and AT-8324 Installation Guide**
  PN: 613-10813-00 Rev A

For management instructions, refer to the following guide:

- **AT-S25 Version 1.4 User's Guide**
  PN: 613-10844-00 Rev C

Both guides are available from the Allied Telesyn web site at **www.alliedtelesyn.com**.

Resolved Issues in Version 1.5

- Broadcast Traffic

  Heavy broadcast traffic caused the switch to reset. This problem has been resolved.

- VLANs

  The following VLAN issues have been resolved:

  - You can now create and modify VLANs without having to reset the stack.
  - Ports removed from a VLAN were not always returned to the Default VLAN.
  - The master switch would periodically lose communications with the slave switches when a new VLAN was created.
  - The VLAN identifier (VID) was not always incremented properly when creating a new VLAN.
  - The VLAN Definition window would display corrupted information if there was a large number of VLANs.

- Show All MACs window

  The following changes have been made to this window:

  - The window now displays the module number of the currently selected switch.
  - The window features a Refresh option which, when selected, polls the switch for the latest MAC address information.
  - The window would display multicast MAC addresses as addresses without a port number. This window no longer displays multicast addresses.

- Get Port from MAC Address window

  This window would occasionally display the wrong VLAN for a switch port. This problem has been resolved. Additionally, this window now displays the module number of the currently selected switch.

- Downloading the Software Image Using TFTP

  This version of the AT-S25 supports downloading the software image onto the switch using TFTP. In order for you to use this feature, both the filename of the software image (not including the filename extension) and the switch's download password must be the same. If they are different, you must change either the image filename or the download password so that they are the same. For example, if the filename of the image is "ATS25.img", then the download password must be "ATS25". (The management software is not case sensitive.) For instructions on how to download the software using TFTP or change the download password, refer to the **AT-S25 Version 1.4 User's Guide**.

- Static MAC Addresses

  This version of the management software supports static MAC addresses. For instructions on how to add static MAC addresses, refer to the **AT-S25 Version 1.4 User's Guide**. The Static MAC Address window features a Refresh option. Selecting this option whenever you add or delete an address will update the window.

- SNMP Traps

  The management software now supports SNMP traps for the fan, power supply, and temperature for both master and slave switches.

- Internal Polling Timer

  The internal polling timer used by the switch to maintain system information and statistical data, such as MAC addresses and Ethernet statistics, has been increased from once every 300 milliseconds to 1 second. The change was made to improve switch and stack performance.

- PCI Bus Lock Up

  The internal PCI bus would periodically lock up, causing the switch and stack to stop forwarding packets. This problem has been resolved.

Resolved Issues in Previous Versions

- Resetting or Power Cycling a Stack

  A stack would experience problems loading the AT-S25 management software after a reset or power cycle if it detected network traffic on the ports. This problem has been resolved. A stack now correctly loads the AT-S25 management software even if there is traffic from end nodes on the switch ports. Only after the AT-S25 software has been loaded and the master switch has determined the number and type of switches in the stack will the switches begin to forward data.

- Disabling Ports on an AT-8316F Series Switch

  Previous versions of the management software did not allow you to disable ports on an AT-8316F Series Switch that was functioning as a slave switch. This problem has been resolved. You can now disable any ports on a slave AT-8316F Series Switch.

- IGMP

  The management software supports IGMP Versions 1.0 and 2.0.

- IP Address Lease Renewal

  The management software now correctly renews its lease for an IP address if it obtained its IP configuration from a DHCP server. This prevents the DHCP server from assigning the switch's IP address to another network device.

- Spanning Tree Protocol and BPDU Packets

  Improperly configured BPDU packets from other devices are now handled properly by the STP algorithm. This reduces the possibility of unexpected network loops in some network environments.

- AT-A18 Expansion Module

  Earlier versions of the management software did not allow you to manually configure the operating parameters of an AT-A18 expansion module. This problem has been resolved.

- Dynamic MAC Addresses Table

  The management software now allows you to display the dynamic MAC address table. For instructions, refer to Chapter 4, Configuring the MAC Address Table, in the **AT-S25 Version 1.4 User's Guide**.

New Features in Previous Versions

- New Port Security Level

  A new level of port security has been added to the management software. Referred to as Limited Level Security, this feature allows you to specify a maximum number of MAC addresses a port on the switch can learn. Once the maximum number of addresses has been learned, any additional MAC addresses encountered on the port are considered "intruders" and the port is disabled. For further information on this feature, refer to Chapter 3, Configuring the Ports, in the **AT-S25 Version 1.4 User's Guide**.

- New Basic VLAN Mode

  A new VLAN operating mode called Basic VLAN has been added to the management software. When this mode is activated, tagged packets as well as untagged packets are forwarded based on a packet's destination MAC address only. The VLAN tag within tagged frames is ignored. For further information on this new feature, refer to Appendix A, Introduction to Virtual LANs, in the **AT-S25 Version 1.4 User's Guide**.

Operational Notes

- Stack Boot Up Times

  The management software in the master switch performs a series of operations whenever you power on or reset an AT-8300 Series stack. These processes determine the number of switches in the stack and validate that all switches in the stack are operating with the same version of the management software. Only after the master switch has completed these processes will the stack begin to forward data frames. This boot up sequence can take from two to eight minutes, depending on the size of the stack. Below are the various boot times for an AT-8300 Series stack:

  - One Switch Stack - two minutes
  - Two Switch Stack - four minutes
  - Three Switch Stack - six minutes
  - Four Switch Stack - eight minutes

  The boot times will be significantly longer if the master switch needs to download new software to the slave switches. Downloading software can take up to an additional three minutes per slave switch.

- Omega Password

  Do not use special characters, such as a space, asterisk, or exclamation point, in the Omega password, particularly if you will be managing the switch from a web browser. Web browsers cannot handle special characters in program passwords. The Omega password should be limited to alphanumeric characters (A to Z, a to z, and 1 to 9).

- Web Browser User Name and Password

  If you assign a password to the Omega interface, the management software will prompt you for both a user name and the password whenever you start a web browser management session. The user name is “admin”. The user name cannot be changed.

- Telnet session

  You cannot establish a Telnet management session from a management station that is connected to a slave switch. A Telnet session is possible only from a management station connected to a master switch.

- Virtual LANs (VLANs)

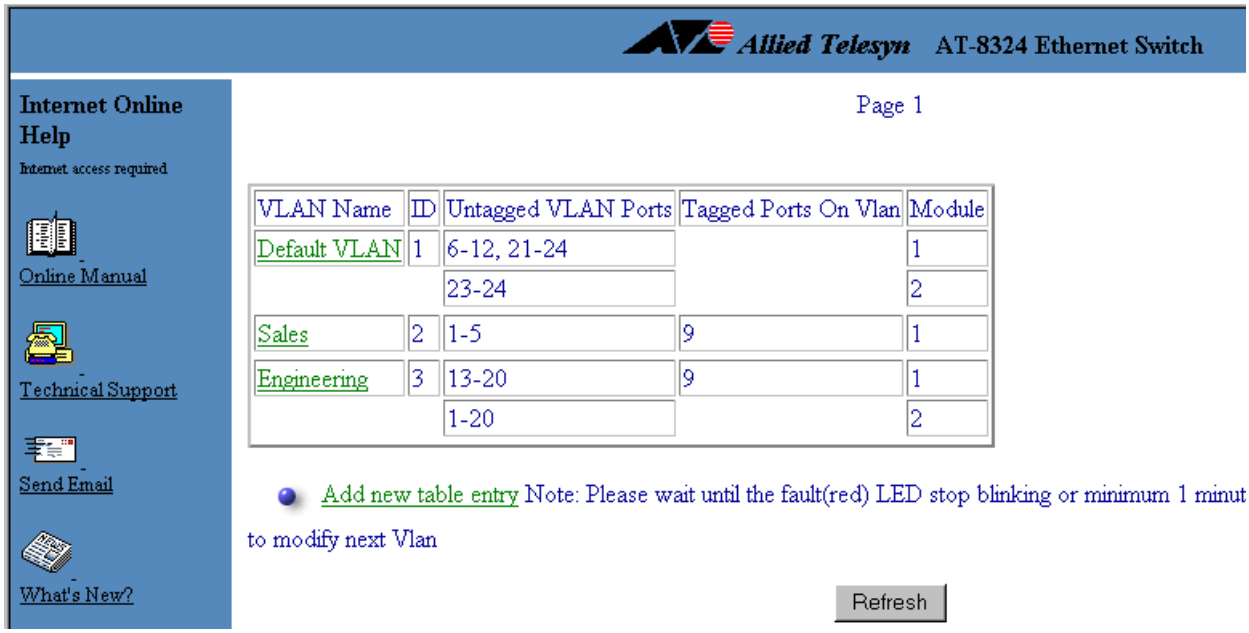
  VLANs should be created or modified only during periods when there is no network traffic. This will limit the possibility of transitory crossover traffic between VLANs during the VLAN modification process.

- Quitting from the Omega Interface

  You should always exit from the Omega interface whenever you are not actively managing a stack. This can help to improve the performance of the stack.

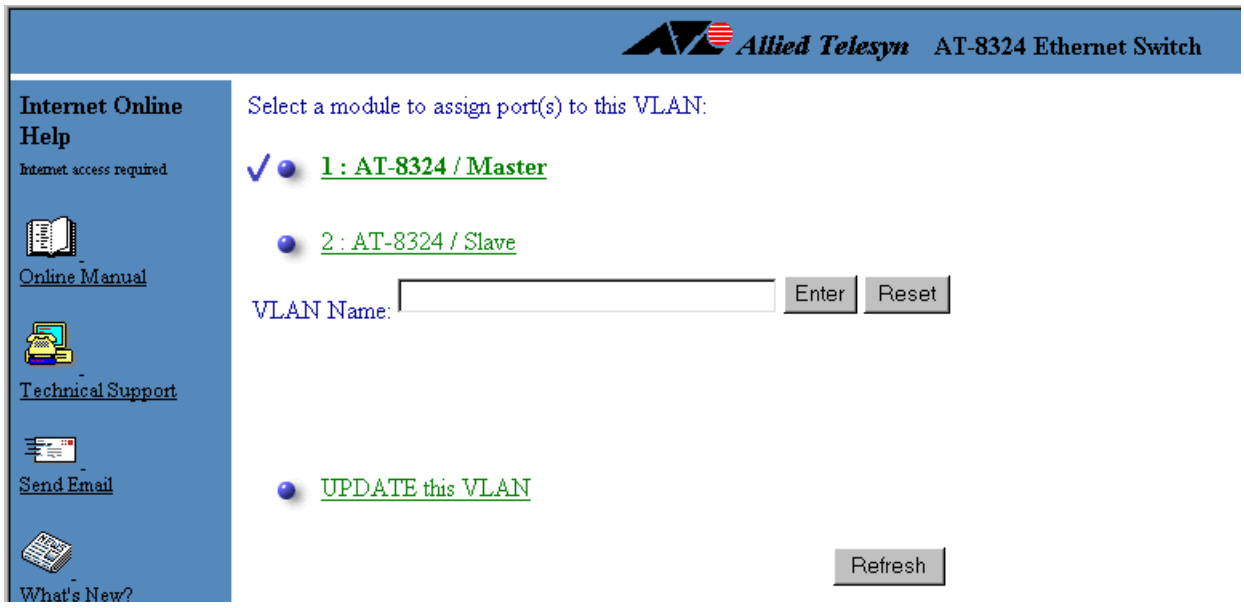
- Creating a VLAN

  The VLAN Definition window has been changed. In previous versions, this window listed the VLANs existing in the stack along with the ports on the currently selected switch that belonged to the VLANs. The window now displays complete port membership for all VLANs and all switches in the stack. An example of the new window is shown below.

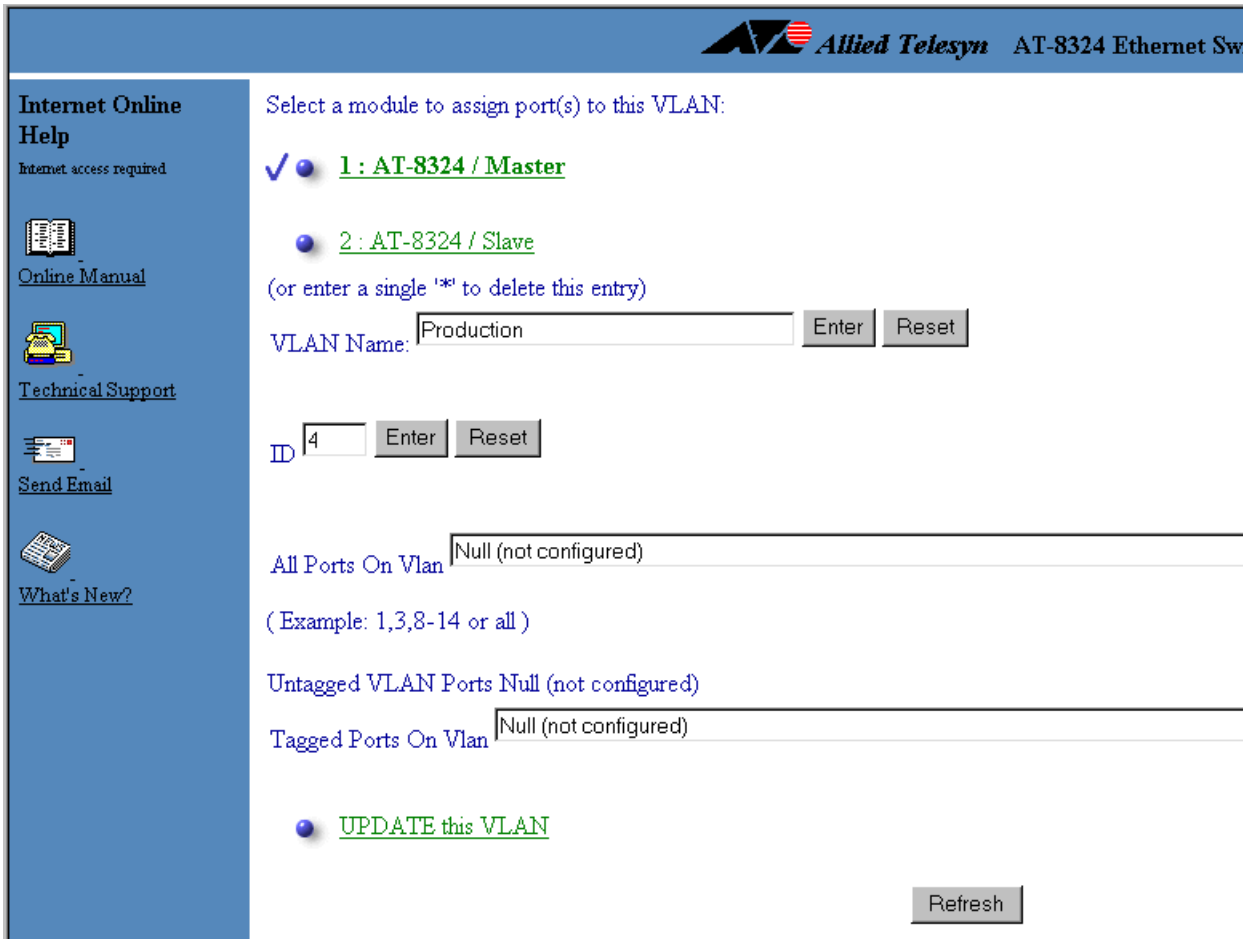

Allied Telesyn AT-8324 Ethernet Switch
Internet Online Help
Internet access required
Online Manual
Technical Support
Send Email
What's New?
Page 1
VLAN Name | ID | Untagged VLAN Ports | Tagged Ports On Vlan | Module
Default VLAN | 1 | 6-12, 21-24 | | 1
| | 23-24 | | 2
Sales | 2 | 1-5 | 9 | 1
Engineering | 3 | 13-20 | 9 | 1
| | 1-20 | | 2
Add new table entry Note: Please wait until the fault(red) LED stop blinking or minimum 1 minut to modify next Vlan
Refresh

  This window features a new column, the Module column. This column lists the different switches in the stack. You can use this column to identify which ports belong to each VLAN for each switch. For example, referring to the screen above, the Engineering VLAN consists of ports 13 to 20 on the master switch (1) and ports 1 to 20 on the slave switch (2).

  When you select *Add new table entry* to create a new VLAN, you are initially prompted only for the new VLAN's name, as shown below.



Once you have entered the new VLAN's name and pressed Return, the VLAN Definition window appears, as shown below.



This window has also been changed. The fields in the window are the same as described in the **AT-S25 V1.4 User's Guide**. The difference is that all of the switches in the stack are now listed at the top of the window. This feature saves time when creating a VLAN that will contain ports from different switches in the stack. Rather than having to return to the Main Menu whenever you need to change the selected switch to add ports to a VLAN, you can simply select the switch from the list in the VLAN Definitions window. This feature is also useful when initially creating a VLAN. Rather than having to first select a switch in the Main Menu, you can go straight to creating the VLAN and select the appropriate switch from the VLAN Definition window.

- Local Management Session and Telnet Management Session

  You cannot operate a local management session and a Telnet management session on the same stack at the same time. Always exit from a local or Telnet management session when you are finished managing a stack to prevent future management sessions from being blocked.

- Port LEDs on an AT-8316F Ethernet Switch

  The port LEDs on an AT-8316F Ethernet Switch may not display the true operating status of the ports. This can occur when a switch is initially installed, when the switch settings are returned to their default settings, or when a stack is reset or power cycled. For example, a port LED might indicate that a port is operating at half duplex when the port is actually operating at full duplex. This problem does not affect port functionality.

  You can resolve this LED problem by performing the following procedure. Since this will require changing the port parameter settings, you should perform this procedure only during periods of no network activity.

  1. Start a local or web browser Omega management session.
  2. From the Omega main menu, select any switch in the stack.
  3. From the Omega main menu, select the *Port Status and Configuration* menu selection.
  4. Select any port.
  5. Set the port parameters to half-duplex.
  6. Select *Global Config* to duplicate the selected port's configuration to all ports in the switch.
  7. Select any port.
  8. Set the port parameters to full-duplex.
  9. Select *Global Config* to duplicate the selected port's configuration to all ports in the switch.
  10. Repeat steps 3 through 9 for each switch in the stack.

  The port LEDs will now display the correct port status. If there are end nodes connected to ports on the switch that are operating half-duplex, be sure to configure those switch ports to half-duplex.

- Spanning Tree Protocol (STP) and Port Trunks

  Do not activate STP on ports that will be part of a port trunk. You should always disable STP on the ports before you create a port trunk.

- Resetting a Stack After Making Configuration Changes

  It is recommended that you reset a stack after you make any configuration changes to port security or IGMP.

- Selecting a Master Switch for a Stack

  The master switch will download its version of the AT-S25 software to a slave switch in a stack if it determines that the slave switch has a different version of the software. This download takes place when the stack is reset or powered on, and occurs even if a slave switch contains a more recent version of the management software. For this reason, when installing a stack you should check to be sure that the switch to be the master switch has the most recent version of the AT-S25 management software of all the switches in a stack. The downloading process can be monitored by connecting a terminal to the RS232 port on the master switch. The downloading of the AT-S25 software from a master to one slave switch takes approximately 3 minutes.

- Default Factory Settings

  If you reset the master switch to the factory default values, the slave switches will retain their current settings until you reset the stack with the Reset buttons or through the Omega interface, at which point all switches will revert to the factory default settings.

- AT-A14 Expansion Module

  The AT-S25 software supports the AT-A14 expansion module, but you cannot manually configure the module. The module will set speed and duplex mode through auto-negotiation.

- Supported VLANs

  An AT-8300 Series stack can support up to 255 VLANs.

- IGMP Snooping and VIDs

  When IGMP snooping is disabled, the AT-S25 software supports VID numbers 2 through 4094. When IGMP snooping is enabled, the management software supports VID numbers 2 through 2047. If you enable IGMP snooping on a stack that has VLANs with VIDs above 2047, you will need to reconfigure the VLANs and assign each a lower VID number.

- Statistics Counters

  The RMON statistic counters do not include packets with errors, such as CRC errors, fragments, and jabbers. Also, the multicast transmit counter is incremented by flooding unicast traffic. Additionally, the SNMP InErrors counter MIB object does not include fragments.

Limitations

- Stacking Limitation

  An AT-8300 Series stack should consist of no more than four switches. Stacks of five or more switches may experience network instability.

- Port Trunking

  Port trunking is supported on the master switch only. Port trunking is not supported on slave switches or on expansion modules in the master switch.

- Statistic Counters

  Alignment errors and CRC errors are reported in the same counter.

- RMON and Uplink Ports

  RMON alarms and the RMON log are not generated for uplink ports.

- BOOTP File Transfers

  This version of the management software does not support file transfers from a BOOTP server. Consequently, you cannot use a BOOTP server to download a new version of the AT-S25 software onto an AT-8300 Series stack. However, you can use a BOOTP server to configure the IP parameters of a stack.

- Static Multicast Addresses

  This version of the management software does not support static multicast addresses. The Omega interface contains menu selections for entering static multicast addresses, but the menu selections have been disabled.

- Fast Switch MIB

  Some MIB objects in the Fast Switch MIB (FSTSWITCH.MIB) are not accessible due to time-out problems.

Contacting Allied Telesyn Technical Support

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